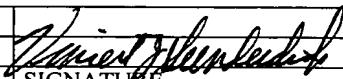


FORM PTO-1390 (REV 01-2003) U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER: 095309.55774US U.S. APPLICATION NO. (if known, see 37 CFR 1.5)
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371		
INTERNATIONAL APPLICATION NO. PCT/EP2003/005964	INTERNATIONAL FILING DATE 06 June 2003	PRIORITY DATE CLAIMED 04 July 2002
TITLE OF INVENTION Piezoelectric Actuator for Media Flowing Therearound and Use of a Corresponding Piezoelectric Actuator		
APPLICANT(S) FOR DO/EO/US Tobias FLAEMIG-VETTER, Heinz OEING and Gregor RENNER		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371 3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. 4. <input checked="" type="checkbox"/> The US has been elected (Article 31). 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input checked="" type="checkbox"/> has been transmitted by the International Bureau c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US) 6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). <ol style="list-style-type: none"> a. <input checked="" type="checkbox"/> is attached herewith. b. <input type="checkbox"/> has been previously submitted under 35 USC 154(d)(4). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) <ol style="list-style-type: none"> a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input checked="" type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)) 10. <input type="checkbox"/> An English translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). 		
Item 11. to 20. below concern other document(s) or information included:		
<ol style="list-style-type: none"> 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A preliminary amendment. 14. <input checked="" type="checkbox"/> An Application Data Sheet under 37 CFR 1.76. 15. <input checked="" type="checkbox"/> A substitute specification. 16. <input type="checkbox"/> A power of attorney and/or change of address letter. 17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825. 18. <input type="checkbox"/> A second copy of the published international application under 35 USC 154(d)(4). 19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 USC 154(d)(4) 20. <input checked="" type="checkbox"/> Other items or information: <ol style="list-style-type: none"> a. Four (4) sheets of formal drawings (Figs. 1-7) b. Copy of Form PCT/IB/308 c. 		

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/520172		INTERNATIONAL APPLICATION NO. PCT/EP2003/005964		ATTORNEY'S DOCKET NUMBER 095309.55774US							
21. The following fees are submitted:				CALCULATIONS	PTO USE ONLY						
				\$							
<input checked="" type="checkbox"/> a) Basic national fee..... \$300.00 <input checked="" type="checkbox"/> b) Examination fee..... \$200.00 <input checked="" type="checkbox"/> c) Search fee..... \$500.00											
TOTAL OF ABOVE CALCULATIONS = \$1000.00				\$1,000							
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.											
Total Sheets	Extra sheets	Number of each add'l 50 or fraction thereof (round up to a whole number)	RATE								
- 100 =	/50 =		x \$250.00								
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 130							
Claims	Number Filed	Number Extra	Rate								
Total Claims	18 - 20 =	0	X \$50.00								
Independent Claims	1 - 3 =	0	X \$200.00								
MULTIPLE DEPENDENT CLAIM(S) (if applicable)				+ \$360.00							
TOTAL OF ABOVE CALCULATIONS =				\$1,130							
<input type="checkbox"/> Applicant claims Small Entity Status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.											
SUBTOTAL = \$1,130											
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).											
TOTAL NATIONAL FEE = \$1,130											
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +											
TOTAL FEE ENCLOSED = \$1,130											
<table border="0"> <tr> <td>Amount to be:</td> <td>\$</td> </tr> <tr> <td>refunded</td> <td></td> </tr> <tr> <td>Charged</td> <td>\$</td> </tr> </table>						Amount to be:	\$	refunded		Charged	\$
Amount to be:	\$										
refunded											
Charged	\$										
a. <input checked="" type="checkbox"/> A check in the amount of \$1,130 for the filing fee (\$1,000) and the surcharge fee (\$130) is enclosed b. <input type="checkbox"/> Please charge my Deposit Account No. <u>05-1323</u> (Attorney Docket No. ==) in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees, which may be required, or credit any overpayment to Deposit Account No. <u>05-1323</u> (ATTORNEY DOCKET NO. <u>095309.55774US</u>). A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.											
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.											
SEND ALL CORRESPONDENCE TO:				 SIGNATURE Vincent J. Sunderdick							
Crowell & Moring, LLP Intellectual Property Group P.O. Box 14300 Washington, D.C. 20044-4300 Tel. No. (202) 624-2500 Fax No. (202) 628-8844											
				NAME							
				29,004							
				REGISTRATION NUMBER							
				January 4, 2005							
				DATE							

10/520172

DT05 Rec'd PCT/PTO 04 JAN 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.	:	To Be Assigned	Confirmation No. :	TBA
First Named Inventor	:	Tobias FLAEMIG-VETTER		
Filed	:	Concurrently Herewith		
TC/A.U.	:	To Be Assigned		
Examiner	:	To Be Assigned		
Docket No.	:	095309.55774US		
Customer No.	:	23911		
Title	:	Piezoelectric Actuator for Media Flowing Therearound and Use of a Corresponding Piezoelectric Actuator		

SUBMISSION OF SUBSTITUTE SPECIFICATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Attached is a Substitute Specification and a marked-up copy of the original specification. I certify that said substitute specification contains no new matter and includes the changes indicated in the marked-up copy of the original specification.

Respectfully submitted,

January 4, 2005



Vincent J. Sunderdick
Registration No. 29,004

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
VJS:vlc
#354319